

Case Studies in Abdominal and Pelvic Imaging

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 Springer

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*To Martin, Alfred, Arnold and Freddie, for making it all worthwhile.
Thanks also to my parents Robin and Gisela Joarder for all their
support over the years.*

Rita Joarder

*Dedicated to my wife and children for being themselves and all
anyone could ask for. Thanks to my generous colleagues in Reading
who selflessly contributed some of the cases.*

Matthew Gibson

To Kay, Ruth and Mark and in memory of Edwin.

Neil Crundwell

Preface

Case Studies in Abdominal and Pelvic Imaging is a collection of 100 real cases, encompassing a broad range from common medical and surgical problems to more rare but interesting pathologies.

The cases demonstrate the use of modern imaging techniques that are generally commonplace to most hospitals, and illustrate how multiple modalities can be used in the investigation of pathology.

The advent of PACS has meant images are more readily available to clinicians for review in clinics, wards, etc. With the increasing number of multi-disciplinary meetings, the imaging of more cases is reviewed and demonstrated by radiologists to a wider group of clinicians. It is therefore important to have an understanding of imaging and not simply to read the report.

In addition more US is being performed as an extension of examination and a good understanding of the appearances and pathologies that may be demonstrated by this clinician-performed US is essential.

This book is aimed at a broad range of specialties including gastroenterology, general and GI surgery, gynaecology and urology and also radiologists in training and medical students.

In addition, we intend its use to extend to those allied professionals who regularly review imaging when treating their patients, e.g. cancer specialist nurses and endoscopists.

The structure of the book is designed to enable the reader to study 100 cases. Each commences with a brief history, accompanied by the relevant images and questions on one page. The answers to the questions are found on the next page, with annotated images demonstrating the salient features. There is then a brief discussion of the condition, key teaching points, references and suggested further reading. This format reflects changes in medical education, where some of the more traditional formats have been replaced by clinical scenarios which often include an element of imaging.

We hope the cases will be interesting as well as educational.

Rita Joarder
Neil Crundwell
Matthew Gibson

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Abbreviations

AAA	Aortic aneurysm
AD	Autosomal dominant
AFP	Alpha-fetoprotein
AIDS	Acquired immune deficiency syndrome
APCKD	Adult polycystic kidney disease
AXR	Abdominal X-ray
BP	Blood pressure
CA	Coeliac axis
CBD	Common bile duct
CE	Contrast enhanced
CEA	Carcinoembryonic antigen
CEUS	Contrast enhanced ultrasound
CHD	Common hepatic duct
CLO	Campylobacter-like organism test
CRP	C-Reactive protein
CT	Computed tomography
CTA	CT angiogram
CTU	Ct urography, Ct urogram
CXR	Chest X-ray
DWI	Diffusion weighted imaging
ERCP	Endoscopic retrograde cholangiopancreatography
ESR	Erythrocyte sedimentation rate
EUS	Endoscopic ultrasound
EVAR	Endovascular repair
FDG	Fluorine 18 labelled deoxy-glucose
FNA	Fine needle aspiration
FNH	Focal nodular hyperplasia
Gadolinium	
BOPTA	Gadolinium benzyloxypropionictetra-acetate
GB	Gall bladder
GI	Gastro-intestinal
GIST	Gastro intestinal stromal tumour
GP	General Practitioner
GU	Genitourinary tract
Hb	Haemoglobin
HCC	Hepatocellular carcinoma
HRCT	High resolution CT

HU	Hounsfield units
IMA	Inferior mesenteric artery
IMV	Inferior mesenteric vein
IPMT	Intraductal papillary mucinous tumour
IR	Interventional radiology
IV	Intra venous
IVC	Inferior vena cava
IVU	Intra venous urogram
KUB	Kidney Ureters Bladder
LFTs	Liver function tests
MALT	Mucosa-associated lymphoid tissue
MDCT	Multi-detector CT
MIP	Maximum intensity projection
MPR	Multiplanar reformat
MR	Magnetic resonance
MRA	Magnetic resonance angiography
MRCPC	Magnetic resonance cholangio pancreatogram
MRF	Mesorectal fascia
MRI	Magnetic resonance imaging
NHL	Non-Hodgkin's lymphoma
OGD	Oesophago gastric duodenoscopy
PCLD	Polycystic liver disease
PDT	Photodynamic therapy
PET	Positron emission tomography
PSA	Prostate specific antigen
PSC	Primary sclerosing cholangitis
PTLD	Post transplantation lymphoproliferative disorder
RIF	Right iliac fossa
RMI	Risk of malignancy index
RT	Renal tumors
RUQ	Right upper quadrant
SBO	Small bowel obstruction
SM	Sclerosing mesenteritis
SMA	Superior mesenteric artery
SMV	Superior mesenteric vein
TAE	Transcatheter arterial embolisation
TCC	Transitional cell carcinoma
TCE	Transcatheter embolisation
UC	Ulcerative colitis
US	Ultrasound
VC	virtual colonoscopy
VUJ	Vesico-ureteric junction
WBC	White blood cell